51-700-00013

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Mr. William M. Cash-Robertson
Environmental Engineer
Newport News Shipbuilding
Division of Huntington Ingalls Incorporated
4101 Washington Avenue
Newport News, Virginia 23607

JAN 31 2013

Dear Mr. Cash-Robertson,

This is in response to Newport News Shipbuilding's (NNS's) letter to the Environmental Protection Agency, Region III (EPA Region III), dated July 25, 2012, requesting a determination of the applicability of the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE NESHAP), found at 40 Code of Federal Regulations (CFR) Part 63, subpart ZZZZ, and of the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines (SCIICE), found at 40 CFR Part 60, Subpart IIII. NNS sent this letter to EPA Region III by e-mail on July 25, 2012.

Background:

By way of background, NNS reported that it repairs large U.S. naval vessels and other large vessels. NNS explained that it routinely places vessels in a drydock and then has a contractor clean the exposed vessel surfaces by abrasive blasting prior to NNS doing welding or applying coatings. NNS explained that its contractors do the abrasive blasting using their own portable "blast pots" which they operate using compressed air that they obtain from their own portable diesel engine driven air compressors associated with the blast pots, as well as associated air hoses, etc.

NNS reported that the current practice of its contractors who do abrasive blasting is to set up their equipment near a section of a ship on which they will be working, complete the abrasive blasting work on that section of the ship, and then to move their equipment to near the next section of the ship on which they will be working. NNS explains that its contractors currently move both the blast pots which they use to do the abrasive blasting and the associated air compressors, air hoses, etc.

NNS reports that it will be starting a new U.S. navy ship repair in 2013 that will require abrasive blasting and that will take about 15 months to complete. NNS explained that while the contractor it hires to do the abrasive blasting for this ship repair project will continue to use its own portable blast pots and its own portable air compressors, etc., the NNS is considering allowing the contractor to move only the blast pots, and requiring the contractor to locate and operate the air compressors at a fixed site (the "air station") away from the busy dry dock area.

NNS reported that for this job the contractor might supply its blast pots with compressed air using either diesel-powered air compressors, or, alternatively, diesel powered electric generators and electric air compressors. The NNS said that though this equipment would be kept and operated at the air station, the equipment would still actually be portable equipment.

NNS also noted that while the diesel-powered air compressors, or the alternative diesel powered electric generators and electric air compressors, would be kept and operated at the air station, "the contractor's inventory of equipment within the NNS facility would naturally change over the contract period as a result of adding or removing equipment to meet changing compressed air demands, conducting periodic preventive maintenance and repairs on equipment, replacing failed equipment, and other reasons as may be determined by the contractor, and physical movement of the equipment would occur as the contractor adds or removes equipment from the inventory."

Overview of NNS's Applicability Determination Request

NNS states in its applicability determination request that it believes, with respect to its current abrasive blasting practice, that "[b]ecause these diesel engines are installed on portable equipment and are moved to various locations throughout a customer's facility during use, as well as between the facility and the contractor's place of business, these diesel engines currently qualify as nonroad engines under 40 CFR §1068.30 and, thus, are not stationary reciprocating internal combustion engines ("stationary RICE") or stationary internal combustion engines ("stationary ICE"). It follows that they are not subject to the National Emission Standards for Hazardous Air Pollutants for reciprocating internal combustion engines (RICE) at 40 CFR Part 63 Subpart ZZZZ and the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (SCIICE) at 40 CFR Part 60 Subpart IIII."

NNS further states that, "requiring a contractor to locate its portable diesel engine-driven equipment in a consolidated area separate from its portable blast pots in the manner described above for a 15-month period raises certain questions as to continued qualification of the engines as nonroad engines and potential applicability of the internal combustion engine regulations at 40 CFR Part 63 Subpart ZZZZ and 40 CFR Part 60 Subpart IIII."

NNS goes on to note that "[i]n particular, 40 CFR §1068.30 Nonroad Engine (2)(iii) states in part:

> (2) An internal combustion engine is not a nonroad engine if it meets any of the following criteria…
>
> (iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a

location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period."

In its applicability determination request NNS asks that EPA respond to questions regarding whether or not the engines which NNS's contractors will use to power their abrasive blasting equipment will be subject to the internal combustion engine regulations at 40 CFR Part 63 Subpart ZZZZ and 40 CFR Part 60 Subpart IIII, and related follow-up questions.

NNS's Applicability Questions and EPA's Responses:

Question 1:

Does EPA agree that, if a contractor-owned portable equipment (such as an air compressor or electric generator) containing a nonroad diesel engine is intermittently moved during normal use (i.e., in and around the drydock area) but remains in the same general physical area (i.e., in the general vicinity of the drydock area) at its customer's facility (NNS' shipyard) for a temporary period exceeding twelve (12) months pursuant to a contractual agreement, the portable equipment does not remain at a "location", defined at 40 CFR §1068.30 as "any single site at a building, structure, facility, or installation" and, therefore, continues to qualify as a nonroad engine, as defined at 40 CFR §1068.30?

Response:

No, EPA does not agree. EPA's disagreement is based on the nonroad engine definition at 40 CFR §1068.30 Nonroad Engine (2)(iii), which provides, as NNS notes in its applicability determination request, that an engine is considered a stationary engine and not a nonroad engine if the engine "remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replace an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period."

EPA notes that NNS's shipyard is a very large facility. As NNS reports on its website: "Spanning more than 550 acres, at the mouth of the Chesapeake Bay, our shipyard sits on 2.5 miles of waterfront property along the James River. Our facilities range from manufacturing facilities (we have our own Foundry and Machine Shop) to dry docks and piers." NNS also provides the further details that that it has three large drydocks and a floating drydock, four large piers and an outfitting birth, as well as numerous specific types of repair shops and other facilities. See: http://nns.huntingtoningalls.com/about/facilities.

EPA considers NNS's shipyard in its entirety to be a "facility" or an "installation" and EPA considers each of the drydocks at NNS's shipyard to be a "location" or "single site," as those terms are used in the nonroad engine definition at 40 CFR §1068.30 Nonroad Engine (2)(iii). Portable equipment used at the drydock is at one location or site whether or not the equipment is moved while at the site.

Under either NNS's current or its possible future abrasive blasting procedures, as discussed earlier, if NNS's contractors keep any of their diesel powered portable equipment at the drydock for more than 12 consecutive months, the diesel engines associated with the portable equipment would qualify as stationary engines under the provisions at 40 CFR §1068.30 Nonroad Engine (2)(iii).

Note that this EPA determination applies to both NNS's current as well as its possible future abrasive blasting procedures. EPA disagrees with NNS's view that all of the portable diesel powered abrasive blasting equipment which its contractors use under NNS's current abrasive blasting practices should without question be considered to be powered by nonroad engines. The equipment is powered by nonroad engines only if the equipment does not remain at the drydock for more than 12 consecutive months. Because the drydock is a single location or site, whether or not the equipment is moved while at the drydock is not relevant.

Question 2:

If the answer to Question 1 is in the negative, would the contractor's diesel engine then be considered by EPA to be subject to the internal combustion engine requirements at 40 CFR Part 63 Subpart ZZZZ and 40 CFR Part 60 Subpart IIII?

Response:

Any portable diesel powered abrasive blasting equipment that remains at the drydock for more than 12 consecutive months would be considered to be powered by stationary engines. The engines, as stationary engines, would be subject to the NESHAP for RICE at 40 CFR Part 63 Subpart ZZZZ. The engines would also be subject to the NSPS for SCIICE at 40 CFR Part 60 Subpart IIII if the engines were built after April 1, 2006, and met the other applicability criteria at 40 CFR §60.4200.

Question 3:

If the answer to Question 1 is in the negative, would the contractor's diesel engine resume being a nonroad engine when the equipment containing the engine is removed by the contractor from the customer's (NNS') facility and returned to the contractor's place of business and made available by the contractor for the potential use by other customers?

Response:

The future classification of the engine powering the contractor's portable equipment would be based on how the contractor uses the engine and the associated equipment at future jobs. The engine powering the equipment would be considered a nonroad engine if the contractor doesn't use the engine at the contractor's next job for more than 12 consecutive months at the same site.

Question 4:

If the answer to Question 1 is in the negative, and considering that the ultimate duration of a specific engine's time residing onsite at the NNS facility cannot be known at the beginning of the time period, at what point in time during the time period exceeding twelve (12) months would the various requirements imposed by 40 CFR Part 63 Subpart ZZZZ and 40 CFR Part 60 Subpart IIII be considered by EPA to first apply to the engine?

Response:

The requirements imposed by 40 CFR Part 63 Subpart ZZZZ and 40 CFR Part 60 Subpart IIII (if applicable) apply when an engine is first placed at the location where it is to be used if it is expected that the engine will remain at that location for a sufficient time to be considered a stationary engine. This is consistent with the nonroad engine definition at 40 CFR §1068.30 Nonroad Engine (2)(iii) which states that an engine is considered a stationary engine and not a nonroad engine if the engine "remains *or will remain* at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source." (emphasis added.)

If additional portable diesel powered air compressors, or portable diesel electric generators that powered electric air compressors, are brought to the drydock to provide extra capacity, but they are not expected to remain at the drydock for more than 12 consecutive months, they would be considered to have non-road engines and the engines would not be subject to the NESHAP for RICE at 40 CFR Part 63 Subpart ZZZZ or to the New Source Performance Standard for SCIICE at 40 CFR Part 60 Subpart IIII.

NNS and its contractors would need to be able to clearly identify any such supplemental portable diesel powered air compressors, or portable diesel electric generators, and to document that they did not expect to keep, and did not keep, such equipment at the dry dock for more than 12 consecutive months.

Question 5:

If a contractor-owned portable equipment (such as an air compressor or electric generator) containing a nonroad diesel engine located at a customer's (NNS) facility is permanently removed by the contractor from its physical location so that the contractor may perform needed repairs, such that it resided at the customer's (NNS) facility for a total period of less than twelve (12) months, and is replaced at the same physical location by another contractor-owned portable equipment of the same capacity to continue to meet the current capacity demand, such that the physical location in question was later determined to have contained a nonroad diesel engine for a cumulative time period exceeding twelve (12) months, will either nonroad engine cease qualifying as a nonroad engine, as defined at 40 CFR §1068.30 and, if so, which engine and at what point in time?

Response:

Both the engine powering the originally installed diesel powered air compressor or diesel electric generator and the engine powering its replacement would be considered stationary engines. This is the case because the nonroad engine definition at 40 CFR §1068.30 Nonroad Engine (2)(iii) provides that an engine is considered a stationary engine and not a nonroad engine if the engine "remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. Any engine (or engines) that replace an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period."

Question 6:

If a contractor-owned portable equipment (such as an air compressor or electric generator) containing a nonroad diesel engine located at a customer's (NNS) facility is permanently removed by the contractor from its physical location, such that it resided at the customer's (NNS) facility for a total period of less than twelve (12) months, and is replaced at the same physical location by another contractor-owned portable equipment of different capacity to meet legitimate changes in capacity demand, such that the physical location in question was later determined to have contained a nonroad diesel engine for a cumulative time period exceeding twelve (12) months, will either nonroad engine cease qualifying as a nonroad engine, as defined at 40 CFR §1068.30 and, if so, which engine and at what point in time?

Response:

As in the response to Question 5, both the engine powering the originally installed diesel powered air compressor or diesel electric generator and the engine powering its replacement would be considered stationary engines. This is the case because the nonroad engine definition at 40 CFR §1068.30 Nonroad Engine (2)(iii) provides that an engine is considered a stationary engine and not a nonroad engine if the engine "remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source.

Any engine (or engines) that replace an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period." If the original and replacement engines power equipment that performs a similar function, the fact that the original engine and/or the equipment it powers and the replacement engine and/or the equipment it powers differ in capacity is not relevant.

If you have any have any questions regarding this response, please contact Mr. Ray Chalmers of my staff at 215-814-2061.

Sincerely,

Diana Esher, Director
Air Protection Division

cc: Ms. Patricia Buonviri, VADEQ